Balanced Scorecard
Fall 2010
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Internal Business Process

Objective: Maintain Station Heat Rate
Initiative: Complete Compressed Air Usage Project, Shut Down One Compressor

History: On September 30, 2003 Unit 2 tripped. That trip was, in part, the result of a 3/4" hose tied between the Baghouse service air piping and the nonessential air line running on the outside of Unit 2 Baghouse. The hose had been installed to help boost pressure in the Baghouse. The trip exposed how vulnerable the compressed air system at IPP had become. IPSC then began the long process of shoring up the plant compressed air system. At that time, four air compressors were required to maintain plant processes.

Status: Five key compressed air projects were identified as necessary to regain redundancy and ensure plant reliability:

1. Leak management program.
2. Reduce plant air compressor discharge pressure set point.
3. Larger supply piping to baghouse air receivers.
4. New air dryers.
5. Upgraded compressor controls.

Leak Management Program

This program includes the unwanted leaks from loose fittings or worn out equipment and inappropriate air usage.

Inappropriate uses were once commonplace, but plant wide efforts have reduced the usage of pneumatic air movers (air horns) and other continuous unregulated uses by substituting electric fans where appropriate. While there are applications where no other acceptable substitute exists, IPSC supervision continues to encourage that they be shut off during breaks and at the end of the day.

Regular leak surveys are being performed by Operations. In addition, leak surveys of specific problem areas are being added to Maintenance PM work orders.

Progress and future planning is coordinated in a quarterly compressed air management meeting chaired by Technical Services.

Reduce Plant-Air Compressor Discharge Pressure Set point

Centrifugal compressors work much like a pump; when the discharge pressure is reduced, the volumetric flow increases. A reduction in pressure equals higher flow, but it also instantly reduces the size of system leaks and consumption at unregulated equipment. The upgraded compressor controls allow the plant to run at lower operating pressures.